#### United States Coast Guard



# OFFSHORE SUPPLY VESSEL INSPECTION BOOK

Name of Vessel					
Official Number		Class			
Date Completed		Location	on		
Vessel Built in Com	pliance with S	SOLAS:	60 74	74/78	N/A
Route					
Oceans	Limited Coas	stwise	Lakes /	/ Bays / S	Sounds
Coastwise	Great Lakes		Rivers		
Inspection Type					
Inspection for Certif	ication (COI)		Reinsp	ection	
Inspectors					
1		3			
2		4			

Deficiency	MSIS Code	Req't. Issued / Date Completed

Deficiencies identified should be listed with MSIS codes. At completion of inspection/examination, any outstanding deficiencies shall be entered in MIDR or PSDR as appropriate. All deficiencies found (outstanding and completed) shall be entered in the Deficiency Summary. Worklist items. which serve only as memory joggers to complete inspection/examination (e.g., test emergency fire pump), should not be coded as deficiencies.

#### **MSIS Codes for Deficiencies:**

BS	Ballast	DC	Dry Cargo	IC	I/C Engine
ВІ	Bilge	ES	Electrical	LS	Lifesaving
ВА	Boiler, Aux.	FF	Firefighting	MI	Miscellaneous
вм	Boiler, Main	FL	Fuel	NS	Navigation
cs	Cargo	GS	General Safety	PP	Propulsion
DM	Deck Machinery	НА	Habitation	SS	Steering
DL	Doc., Lics., Pmts.	HU	Hull		

#### **Use of Offshore Supply Vessel Inspection Book:**

This inspection book is intended to be used as a job aid by Coast Guard marine inspectors during hull and machinery inspections of U.S. flagged offshore supply vessels (OSVs) subject to Subchapter L. For OSVs built prior to March 15, 1996, Subchapter I or Subchapter T may apply; therefore, cites from CG-840 HI, CG-840 MI, or CG-840 T may be referenced. The lists contained within this book are not intended to limit the inspection. Each marine inspector should determine the depth of inspection necessary. A checked box should be a running record of what has been inspected. It does not imply that the entire system has been inspected or that all or any items are in full compliance. This job aid does not constitute part of the official inspection record.

This document does not establish or change Federal laws or regulations. References given are only general guides. Refer to IMO publications, CFR's, NVIC's or any locally produced cite guides for specific regulatory references. Not all items in this book are applicable to all vessels.

**NOTE:** Guidance on how to conduct inspections of U.S. flagged offshore supply vessels can be found in the Marine Safety Manual (MSM) Volume II, Chapter B1: Inspection of Vessels for Certification. All MSM cites listed in this book refer to MSM Volume II unless otherwise indicated.

#### **Pre-inspection Items:**

- Review MSIS records.
  - **MIPIP**
  - MICOI
- issued.

#### **Post-inspection Items:**

Issue letters/certificates to vessel.

- Obtain copies of forms to be
- Complete MSIS entries.
  - MIAR
  - **MSDS**
  - **MIDR**
  - **VFLD**
  - **VFID**
- Initiate Report of Violation (ROV) if necessary.

## **Recommended US Vessel Deficiency Procedures:**

Step	Acti	on
1	Identify deficiency.	
2	Inform vessel representative.	
3	Record on the Deficiency Summ	ary Worksheet (next page).
4	If deficiency is corrected prior to	end of inspection, go to Step 7.
5	If deficiency is unable to be correissue CG-835 in accordance with	
	IF deficiency:	THEN issue CG-835:
	Does NOT immediately impact crew/passenger safety, hull seaworthiness, or the environment, e.g.,	That provides a specific time for correcting deficiency, e.g.,  • "X" number of days
	Missing placards     Non-metallic expansion joints if more than 10 years in service	At next drydock
	Allows vessel operations to be MODIFIED to meet less stringent requirements, e.g.,  • Expired international certificates  • Automation defect  • Insufficient lifesaving equipment	That restricts operation of vessel to meet current vessel conditions, e.g.,  • Reduced route • Increased crew • Fewer offshore workers
	DOES immediately impact crew/passenger safety, hull seaworthiness, or the environment, and cannot be modified to meet less stringent requirements, e.g.,	That requires the deficiency to be corrected prior to operating vessel ("NO SAIL" item), e.g.,  • Prior to carrying offshore workers
	Missing or defective firefighting equipment     Structural defect or damage	Prior to carrying cargo
6	Enter CG-835 data in MIDR.	
7	Enter deficiency data in MSDS.	
8	Initiate Report of Violation (ROV)	) if necessary.

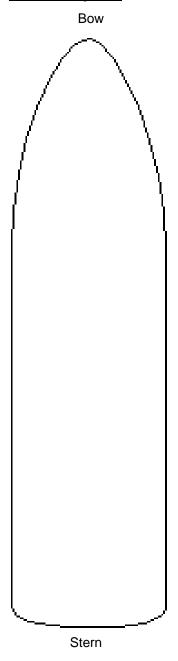
#### **Section 1: Administrative Items**

### **IMO Applicability Dates:**

Reference	Date
SOLAS 1960	26 MAY 65
SOLAS 1974	25 MAY 80
1978 Protocol to SOLAS 1974	01 MAY 81
1981 Amendments (II-1 & II-2)	01 SEP 84
1983 Amendments (III)  Various additional amendments to SOLAS	01 JUL 86
various additional amendments to SOLAS	
MARPOL 73/78 Annex I	02 OCT 83
MARPOL 73/78 Annex II	06 APR 87
MARPOL 73/78 Annex III	01 JUL 92
MARPOL 73/78 Annex V	31 DEC 88
IBC Code	After 01 JUL 86
BCH Code	Prior to 01 JUL 86
COLREGS 1972	15 JUL 77
Various additional amendments to COLREGS	
Load Line 1966	21 JUL 68
STCW 1978	28 APR 84
1991 Amendments	01 DEC 92
1994 Amendments	01 JAN 96
1995 Amendments	01 FEB 97

## **Section 6: Appendices**

## Vessel Layout:



- Ballast tanks
- Deckhouse location
- Deck cranes
- Fuel tanks
- Cargo tanks
- Peak tanks
- Legs

## **Vessel Information:**

Classification Society							
ISM	ISM Issuer: Same as above?						
Yes No If not the same, which Recognized Organization?							
<b>NOTE:</b> The period of validity for ISM documents should correspond to the following list. If they do NOT, ISM documents should be further investigated.							
	5 years = Full term (SMS and DOC)		12 months = In	terim (DOC)			
	6 months = Interim (SMC)		5 months = Sh	ort term (SMC)			
Gros	ss Tons			No Change (VFMD)			
Net <sup>-</sup>	Tons			No Change (VFMD)			
Built	Date (use delivery date)	No Change (VFCD)					
Ove	rall Length (in feet)			No Change (VFMD)			

#### **Section 5: Drills**

☐ Fire Drill:		
Initial notifications	Familiarity with duties	Space isolation
General alarms / signals	Familiarity with equipment	Smoke control
Crew response	Fire pumps started	Arrange care of passengers
Properly dressed / equipped	Two jets of water	Communications w/ bridge
Language understood by crew	Fire doors and dampers	
(SOLAS 74/78 III/18.3; MSM Vo	I. II/D5.C.7.i; NVIC 6-91)	
Location:		Time on Scene:
Notes:		

Name of Certificate	Issuing Agency	# <u>Q</u>	Port Issued	Issue Date	Exp. Date	Endors. Date
International Oil Pollution Prevention (IOPP) No Change						
International Tonnage (ITC) No Change						
Safety Management (SMC) No Change						
Document of Compliance (DOC) No Change						
FCC Station License No Change	FCC					
FCC Safety Certificate No Change	FCC					
FCC Operations Permit No Change	FCC					
FCC Marine Radio Operator Permit No Change	FCC					

Aux	<u> «iliary Machinery:</u>			Lifesaving equipment maintenance record	46 CFR 131.545 SOLAS 74/78 III/19
	Bilge and ballast systems	46 CFR 128.440		SOLAS training manual	SOLAS 74/78 III/18.2
	<ul> <li>Pumps</li> <li>Eductors</li> <li>Emergency bilge pump</li> </ul>			Liftboat operating manual  Coast Guard approved  Understandable to crew	46 CFR 134.170
	<ul> <li>Manifold, valves, and piping</li> <li>Remote controls (hydraulic, pneumatic, manual, electric)</li> <li>Strainers</li> <li>Sounding and vent piping</li> <li>Markings and indicators</li> </ul>		□ <u>Poll</u> i	Information available to master  Loading manual Trim and stability book  ution Prevention Records:	46 CFR 78.17-20 46 CFR 97.15-5 SOLAS 74/78 II-1/22.1
	Alarm  Con quatient and quark and discharges	46 CFR 130.460		Oil record book (Part 1)	MARPOL Ax. I/20
	Sea suctions and overboard discharges  Nonmetallic expansion joints  External exam	MSM Ch. B3.F 46 CFR 61.15-12 MSM Ch. B3.F.3		<ul> <li>Each operation signed by person-in-charge</li> <li>Each complete page signed by master</li> <li>Book maintained for 3 years</li> </ul>	33 CFR 151.25
	10-year service replacement			Shipboard oil pollution emergency plan	MARPOL Ax. I/26.1 33 CFR 151.26
	Compressed air system  • Compressor	46 CFR 58.30		<ul> <li>Approved by Coast Guard / class society</li> <li>Contact numbers correct</li> <li>Immediate Actions List</li> </ul>	33 CFR 131.20
	<ul><li>Controls and gauges</li><li>Relief valves</li></ul>			Vessel response plan (vessels carrying oil as secondary cargo)	33 CFR 155.1030
	Refrigeration and air conditioning systems	46 CFR 128.410		<ul><li>Approved by Coast Guard</li><li>Annual review by owner / operator</li></ul>	33 CFR 155.1065 33 CFR 155.1070
	<ul> <li>Pumps</li> <li>Valves and controls</li> <li>Air cushion supply line</li> </ul>			Oil transfer procedures  Posted List of products carried by vessel Description of transfer system including a line diagram of piping Number of persons required on duty Duties by title of each person Means of communication Procedures to top off tanks Procedures to report oil discharges	33 CFR 155.720
Notes	:		Notes	5:	

		e vessels hydros y examined	statically tested	Or 46 CFR MSM C MSM V	h. B1.	0	1.7	Control panels	46 CFR 111.75-17(d) 46 CFR 129.430 72 COLREGS
	Serv	rice MAW		Tested or ned Internally		ief Va		<ul> <li>Special day and night signals</li> <li>Distress signals and stowage</li> <li>Whistle, light, bells, gongs</li> <li>Day and night signal devices</li> </ul>	46 CFR 133.60 33 CFR 81.9
								<ul> <li>Steering gear</li> <li>Main gear tested (all stations)</li> <li>Auxiliary gear tested (all stations)</li> <li>Instructions and markings</li> <li>Rudder angle indicator</li> <li>Illumination</li> <li>Alarms</li> </ul>	46 CFR 130.130 46 CFR 130.140 MSM Ch. C4.F 46 CFR 131.845 46 CFR 131.850
Boi	Automa  Conf Fuel Alari Insp	tic auxiliary boile trols and safety device systems ms ections / test t test and inspect nce with 46 CFR	rs ces tion of boilers in		Ch. B1. 8 63.15 8 63.20 8 63.15 8 63.15	.H i-1 i-3 i-7	)	<ul> <li>Float-free arrangement</li> <li>Battery date current</li> <li>Hydrostatic release</li> <li>Marked with vessel name</li> <li>9 GHz radar transponder (SART)</li> </ul>	46 CFR 133.60 SOLAS 74/78 IV/7.1.6 46 CFR 131.890 SOLAS 74/78 III/6.2 NVIC 9-93
	Boiler ID Number	Date Hydrostatically Tested	Date Mountings Opened	Date Mountings Removed and Studs Examined	Fireside	Waterside	External		46 CFR 112.43 46 CFR 131.840
Notes	::							es:	

		☐ Paint stowage
Ship's service generators  Protective guards Reverse power relay Overspeed trip (> 110% < 115%) Low oil pressure alarm / shutdown  Switchboards (including emergency) Automatic bus transfer	46 CFR 110.10 46 CFR 111.12 46 CFR 129.315 46 CFR 129.320 SOLAS 74/78 II-1/41 MSM Vol. IV Ch. 3.D.2 46 CFR 129.330 MSM Ch. B1.J.4.g	<ul> <li>Fireproof / metal lined</li> <li>Lighting / electrical</li> <li>Fire protection</li> <li>Storerooms</li> <li>Stowage</li> <li>Fire hazards</li> <li>Lighting and wiring</li> </ul>
<ul> <li>Ground detectors</li> <li>Personnel safeguards (guards, rails, mats, etc.)</li> <li>Drip shields</li> <li>Warning notices posted</li> <li>Circuit breaker ratings</li> <li>Panelboards</li> </ul>		Structural Integrity:  Hull structure (list inaccessible compartments or areas)  Decks Shell  Structural Integrity:  46 CFR 126.4  1CLL 66 Reg.
<ul> <li>Overcurrent devices</li> <li>Circuit directory</li> <li>Locking device</li> </ul> Motor controllers	46 CFR 111.70	<ul> <li>Bulkheads</li> <li>Tank tops</li> <li>Strength members</li> <li>Approved plans available</li> <li>46 CFR 126.1</li> </ul>
<ul> <li>Drip shields</li> <li>Disconnect switch</li> <li>Wiring diagram posted</li> <li>Remote shutdowns tested</li> </ul> Ventilation systems	46 CFR 127.250	Hull openings and closures  Air ports and dead covers Closing devices, gaskets Light / water test Closed prior to departure  46 CFR 42.15 MSM Ch. B1. ICLL 66 Regs
<ul> <li>Remote shutdown tested</li> <li>Machinery space fans</li> <li>Ship's service lighting systems</li> <li>Panelboards</li> </ul>	SOLAS 74/78 II-1/48  46 CFR 111.75  46 CFR 111.40	Deck openings and closures  Closing devices, gaskets  Light / water test  Closed prior to departure  MSM Ch. B1. ICLL 66 Regs
<ul> <li>Circuit directory</li> <li>Circuit breakers</li> <li>Globes and guards</li> <li>Explosion-proof or watertight (where required)</li> </ul>	46 CFR 129.410	Guards, ladders, rails, and gangways (including accommodation ladders or pilot ladders)  46 CFR 127.3 46 CFR 127.3 46 CFR 127.3 1CLL 66 Reg.
::		Notes:
	<ul> <li>Protective guards</li> <li>Reverse power relay</li> <li>Overspeed trip (&gt; 110% &lt; 115%)</li> <li>Low oil pressure alarm / shutdown</li> <li>Switchboards (including emergency)</li> <li>Automatic bus transfer</li> <li>Ground detectors</li> <li>Personnel safeguards (guards, rails, mats, etc.)</li> <li>Drip shields</li> <li>Warning notices posted</li> <li>Circuit breaker ratings</li> <li>Panelboards</li> <li>Overcurrent devices</li> <li>Circuit directory</li> <li>Locking device</li> <li>Motor controllers</li> <li>Drip shields</li> <li>Disconnect switch</li> <li>Wiring diagram posted</li> <li>Remote shutdowns tested</li> <li>Ventilation systems</li> <li>Remote shutdown tested</li> <li>Machinery space fans</li> <li>Ship's service lighting systems</li> <li>Panelboards</li> <li>Circuit directory</li> <li>Circuit breakers</li> <li>Globes and guards</li> </ul>	Protective guards Reverse power relay Reverse power relay Overspeed trip (> 110% < 115%) Low oil pressure alarm / shutdown  Switchboards (including emergency) Automatic bus transfer Ground detectors Personnel safeguards (guards, rails, mats, etc.) Drip shields Warning notices posted Circuit breaker ratings  Panelboards Overcurrent devices Circuit directory Locking device  Motor controllers Prip shields Disconnect switch Wiring diagram posted Remote shutdown tested Machinery space fans Ship's service lighting systems Globes and guards Circuit breakers Globes and guards Globes and guards Globes and guards Explosion-proof or watertight (where required)  MSM Ch. B1.1.12 46 CFR 111.72 MSM Ch. B1.J.4.1  46 CFR 111.70 MSM Ch. B1.J.4.1  46 CFR 129.330  47 CFR 129.330  48 CFR 111.70 MSM Ch. B1.J.4.1  49 CFR 129.330  40 CFR 129.330  41 CFR 129.330  42 CFR 111.70 MSM Ch. B1.J.4.1  43 CFR 111.70 MSM Ch. B1.J.4.1  44 CFR 111.70 MSM Ch. B1.J.4.1  45 CFR 129.330  46 CFR 111.70 MSM Ch. B1.J.4.1  47 CFR 129.330  48 CFR 111.70 MSM Ch. B1.J.4.1  49 CFR 111.75  40 CFR 111.75  40 CFR 111.75  40 CFR 111.75  40 CFR 111.40  40 CFR 111.40

	Oily waste retention	MSM Ch. B6.D.7	<u>Liftboats:</u> NOTE: Guidance for inspecting liftboats on OSVs is detailed in NVIC 8-91.	
	<ul><li>Bilge</li><li>Tank</li></ul>		Legs 46 CFR 13	34.140
	<ul><li>Ballast discharge</li><li>Acceptable processing equipment</li></ul>	33 CFR 155.330 33 CFR 155.350 33 CFR 155.360 33 CFR 155.370 MSM Ch. B6.D.10	<ul> <li>Jacking points</li> <li>Pin holes</li> <li>Jacking systems</li> <li>Loss of power alarm</li> </ul>	34.150
	<ul><li>Oily bilge discharge</li><li>Piping system</li><li>Stop valve</li><li>Outlet</li></ul>	46 CFR 155.380	<ul> <li>Low hydraulic fluid level alarm</li> <li>Freeboard markings</li> <li>Firemain suction</li> <li>Distortion</li> </ul>	
	<ul><li>Pump stop</li><li>Prohibited oil spaces</li></ul>	33 CFR 155.470	<ul><li>Flanged</li><li>Attachments</li></ul>	
	Emergency shutdown	33 CFR 155.780	Bulk Tanks:	
	Oil transfer hose  Condition  Markings  Hose assembly requirements  Record of tests and inspections  Garbage  Shipboard garbage properly disposed  Discharge removal equipment	33 CFR 155.800 33 CFR 151.63 MARPOL Ax. V/3 33 CFR 155.220	Bulk cargo pressure tanks internally examined  Pumps and controls Relief valves Piping-valves Lighting and wiring Cofferdams  Service MAWP Date Tested or Examined Internally	Relief Valv Tested
Notes	s:		Notes:	

	Fixed fire extinguishing systems  Controls and instructions Alarms tested Piping Heads, distribution Bottles weighed annually Bottles hydrostatically tested (every 12 years) Flexible loops tested or replaced (10% per year) Markings Storage space / door Vent stops	46 CFR 132.350 SOLAS 74/78 II-2/21 MSM Ch. C2.I.9 NVIC 6-72, Change 1 NVIC 8-73 46 CFR 131.815 46 CFR 131.820 46 CFR 131.825 46 CFR 131.899	Ground Tackle:  Anchors  Tested Windlass Capstans  Mooring and towing gear  Lifesaving Equipment:	46 CFR 130.240 ABS Rules  46 CFR 130.250
_	Fire main system and stations  Pumps Piping Cut-off valves Drains	46 CFR 132.100 NVIC 6-72, Change 1 SOLAS 74/78 II-2/4 SOLAS 74/78 II-2/21 46 CFR 132.110 46 CFR 132.130	NOTE: General maintenance and tests and inspections of lifes in 46 CFR 131.545 and 46 CFR 133.45, respectively.  General alarms  Controls  Batteries and fuses  Tested	46 CFR 113.25 46 CFR 129.530
	Fire stations  Hydrants (2 effective streams)  Nozzles and spanners  Fog applicators (<6 feet in length, in engineroom)  Hose  UL approved  Correct length  Markings  Equipment compatible	46 CFR 132.100 NVIC 6-72, Change 1 SOLAS 74/78 II-2/4 SOLAS 74/78 II-2/21 MSM Ch. C2.I.9 MSM Ch. C2.I.7	<ul> <li>Markings</li> <li>Bell locations audible</li> <li>Lights for high-noise areas</li> <li>Lifeboats stripped, cleaned, and inspected</li> <li>Date of annual servicing</li> <li>Hull and fittings</li> <li>Tanks and fittings</li> <li>Cradles</li> </ul>	46 CFR 131.805 46 CFR 131.810 46 CFR 133.105(a)(6) 46 CFR 199.190(f) 46 CFR 199.201 46 CFR 199.202 46 CFR 199.261 46 CFR 199.262 SOLAS 74/78 III/19.2
	<ul> <li>Total length of all hose tested</li> <li>Hydrostatically tested to at least 100 psi</li> <li>Approved hose</li> <li>Markings</li> </ul>	46 CFR 132.130 46 CFR 132.350 MSM Ch. C2.I.6 46 CFR 131.880	<ul> <li>Gripes</li> <li>Compressed air cylinders</li> <li>Markings</li> </ul> Rescue boat	SOLAS 74/78 III/26 MSM Ch. C2.H.2 46 CFR 199.176 46 CFR 133.135
	Pumps  Controls and gauges  Relief valves	46 CFR 132.120	<ul><li>Approved</li><li>Required equipment</li></ul>	46 CFR 133.175
Notes			Notes:	

	Ring lifebuoys  Lights Lines	46 CFR 133.70 SOLAS 74/78 III/7 SOLAS 74/78 III/21 SOLAS 74/78 III/27		
	<ul><li>Smoke signals</li><li>Markings</li></ul>	46 CFR 131.875		
Ц	<ul> <li>Equipment</li> <li>Required drills held</li> <li>Magazine</li> <li>Type</li> </ul>	46 CFR 133.170		
	Lifejackets  Total  Retro-reflective tape  Lights Whistles Stowage Number of lifejackets rejected by inspector	46 CFR 133.70 SOLAS 74/78 III/7.2.2 MSM Ch. C2.H.4 46 CFR 131.875		
	Lifejacket stowage  Required notices and markings Wearing instructions	46 CFR 133.70 SOLAS 74/78 III/7.2 46 CFR 131.875 46 CFR 133.80		
	Work vests  Approved type Stowage	46 CFR 131.720 46 CFR 131.710 46 CFR 131.730		
	Immersion suits  Condition Retro-reflective tape Markings Placard of lifesaving signals	46 CFR 133.70 SOLAS 74/78 III/21.4, 27.3, 30.2.7 MSM Ch. C2.H.5 46 CFR 131.875 46 CFR 131.950		
	Emergency instructions Station bill posted	SOLAS 74/78 V/16 46 CFR 133.80 46 CFR 131.350		
	S:			

Item Number	ltem	International (LB)/ Oceans (RB)		Short International (LB)/ Coastwise (RB)	
Number		Lifeboat (LB)	Rescue Boat (RB)	Lifeboat (LB)	Rescue Boat (RB)
29	29 Signal, smoke			2	
30	30 Signal, hand flare			6	
31	31 Signal, parachute flare			4	
32	32 Skates and fenders <sup>6</sup>			1	
33	Sponge <sup>5</sup>		2		2
34 Survival instructions		1		1	
35	Table of lifesaving signals			1	
36	<b>36</b> Thermal protective aids <sup>7</sup>		10%	10%	10%
37	37 Tool kit			1	
38	Tow line <sup>8</sup>	1	1	1	1
39	Water (liters/person)	3		3	
40 Whistle		1	1	1	1

#### Footnotes:

- 1 Not required for boats of self-bailing design.
- 2 Not required for inflated or rigid-inflated rescue boats.
- 3 A hatchet counts towards this requirement in rigid rescue boats.
- 4 Oars are not required on a free-fall lifeboat; a unit of oars means the number of oars specified by the boat manufacturer.
- 5 Not required for a rigid rescue boat.
- 6 Required if specified by the boat manufacturer.
- 7 Sufficient thermal protective aids are required for at least 10% of the persons the survival craft is equipped to carry, but not less than two.
- 8 Required only if the lifeboat is also the rescue boat.

Disengaging apparatus examined or tested
and marked as required

46 CFR 199.45(b) SOLAS 74/78 III/41 MSM Ch. C2.H.2.b

- Universal joints
- Safety latches
- Hooks
- Locking knuckles
- Frame

Notes:	S:						